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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,767	12/28/2004	Katarzyna Leijten-Nowak	NL02 0590US	7263
65913	7590	09/18/2007		
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER TRAN, ANH Q	
			ART UNIT 2819	PAPER NUMBER
			NOTIFICATION DATE 09/18/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

**Office Action Summary**

Application No.

10/519,767

Applicant(s)

LEIJTEN-NOWAK ET AL.

Examiner

Anh Q. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-8 is/are rejected.
- 7) ☒ Claim(s) 4 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/28/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Britton et al. (5,396,126).

Claim 1, Britton shows an integrated circuit comprising:

a plurality of substantially identical interconnected building blocks (four blocks 117, Fig. 1, e.g. block 117 including PFU-100, block 117 including PFU-101, block 117 including PFU-102, block 117 including PFU-103) laid out in a regular grid (e.g. four by four), each building block comprising:

a logic cell (PFU);

first routing means (vertical lines 106) coupled to the logic cell (100) for data communication between the logic cell and a first further logic cell (102) on the grid in a first direction; and

second routing means (horizontal lines 107) coupled to the logic cell (100) for data communication between the logic cell and a second further logic cell (101) on the grid in a second direction, and

switch means (S-BLOCK and see figure 2B) for coupling the first routing means to the second routing means;

characterized in that:

a first subset of the plurality of building blocks (block 117 including PFU-101 and block 117 including PFU-103) have their respective first routing means (vertical lines 106) form a part of a routing network surrounding the grid;

a second subset of the plurality of building (block 117 including PFU-102 and block 117 including PFU-103) have their second routing means (horizontal lines 107) form a further part of a routing network surrounding the grid; and

the integrated circuit further comprises a plurality of routing cells (a C-BLOCK and a S-BLOCK is consider a cell, there are two cells on a top row and two cells on the left side) being coupled to the part and the further part of the routing network for completing the routing network surrounding the grid.

Claim 2, Britton shows the integrated circuit as claimed in claim 1, characterized in that the plurality of routing cells comprises a switch cell (C-BLOCKS and S-BLOCK are shown in figures 2A and 2B) for coupling a subset of the plurality of routing cells to one of the first subset and second subset of the plurality of building blocks.

Claim 3, Britton shows the integrated circuit as claimed in claim 1, characterized in that each routing cell from the plurality of routing cells is arranged to connect at least a neighboring logic cell (e.g. 100 and 102 connected to IO BLOCKs through C-BLOCKS, furthermore, the top row routing cells connected to the IO BLOCKs in the same way as the left row, since IO BLOCKs are around the periphery of the integrated circuit, col. 1, lines 54-59) in the grid to off-grid hardware.

Claim 5, Britton shows the integrated circuit as claimed in claim 1, characterized in that the switch means comprise a plurality of programmable switches (S-BLOCKS are shown in figure 2B).

The apparatus described above in claim 1 is applicable to the method claim 8.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Britton et al. (5,396,126).

Claim 6, discloses an integrated circuit as claimed in claim 1, characterized in that: the plurality of routing cells comprises: a first subset of routing cells (a C-BLOCK and a S-BLOCK is consider a cell, there are two cells on a top row) for integrating a third subset of the plurality of building blocks (100 and 102) into the routing network via a first side of the rectangular shape; and

a second subset of routing cells (a C-BLOCK and a S-BLOCK is consider a cell, there are two cells on the left side) for integrating a fourth subset of the plurality of building blocks (100 and 101) into the routing network. Britton discloses the claimed

invention except for the building blocks have a substantially rectangular shape, the first side being different in length to the second side.

It would have been an obvious matter of design choice to modify the building blocks, 117, to have a rectangular shape, the first side being different in length to the second side, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art, furthermore modify the building blocks from a square shape into the rectangular shape would not change in their respective functions.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Britton et al. (5,396,126) in view of Altaf (6,191,611).

Claim 7, Britton discloses the claimed invention except for an electronic device, comprising: data communication means; a data storage element coupled to the data communication means for storing data; a processing element coupled to the data communication means for processing of data by execution of a dedicated task; and an integrated circuit as claimed in claim 1 for further processing of data by execution of a task from a plurality of tasks, the task being selectable by means of configuring the integrated circuit, the integrated circuit being coupled to the data communication means.

Altaf discloses an electronic device (930, Fig. 7), comprising: data communication means (920); a data storage element (906) coupled to the data communication means for storing data; a processing element (904) coupled to the data communication means for processing of data by execution of a dedicated task; and an integrated circuit (PLD) for further processing of data by execution of a task from a

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plurality of tasks, the task being selectable by means of configuring the integrated circuit (PLD is configurable logic), the integrated circuit being coupled to the data communication means.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the PLD of Britton in place of Altaf's PLD, in order to provide wide variety of applications, such as computer networking, data networking, digital processing, or any application where the advantage of using programmable or reprogrammable logic is desirable.

#### ***Allowable Subject Matter***

6. Claims 4, 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Q. Tran whose telephone number is 571-272-1813. The examiner can normally be reached on M-Th (8:00-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**ANH Q. TRAN**  
**PRIMARY EXAMINER**



9/10/07